

Amendments to the claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1 (currently amended) A medical apparatus for therapeutic treatment of foot ulcers, comprising:

a wound dressing for introduction of a negative pressure over a first region of a patient's foot including a wound; wherein said wound dressing is comprised of a porous foam positioned within said foot ulcer, a drape for covering and sealing said foam within said foot ulcer, and a fluid communication means in fluid communication with said foam;

a foot wrap having an inflatable bladder for applying a compressive force over a second region of said patient's foot, concurrent with the introduction of said negative pressure, to compress the veins of said patient's foot and thereby partially empty said veins;

a negative pressure source for supplying negative pressure to said wound dressing through said fluid communication means; and

a positive pressure source for supplying compressive force to said foot wrap; wherein said positive pressure source is comprised of a compressor for filling a reservoir to a target pressure, a control circuit for shutting off said compressor when said target pressure is reached and releasing said air into said inflatable bladder until an equilibrium pressure is reached between said reservoir and said inflatable bladder.

Claim 2 (original) The medical apparatus of claim 1, wherein at least some part of said foot wrap overlaps at least some part of said wound dressing such that at least a portion of said second region overlaps said first region.

Claim 3 (original) The medical apparatus of claim 1, wherein at least some part of said foot wrap overlaps at least some part of said wound dressing such that at least a portion of said second region overlaps said wound.

Claim 4 (original) The medical apparatus of claim 1, wherein:

at least a portion of said wound dressing comprises elastically compressible foam overlapping said wound; and

at least some part of said foot wrap overlaps at least some part of said wound dressing such that said second region overlaps said foam.

Claim 5 (original) The medical apparatus of claim 1, wherein;

said negative pressure source comprises a suction pump; and

said positive pressure source comprises a ventable source of pressurized gas.

Claim 6 (original) The medical apparatus of claim 5, further comprising a control system for defining the negative application of pressure to said wound dressing and the positive application of force to said foot wrap.

Claim 7 (original) The medical apparatus of claim 6, wherein said negative application of pressure aspect of said control system comprises:

a vacuum sensor for measuring the negative pressure supplied to said wound dressing;
and

a first feedback mechanism for controlling, responsive to said measured negative pressure, said suction pump.

Claim 8 (original) The medical apparatus of claim 6, wherein said positive application of pressure aspect of said control system comprises:

a pressure transducer for measuring the positive force supplied to said foot wrap; and

a second feedback mechanism for controlling, responsive to said measured positive force, the venting of said source or pressurized gas into said foot wrap.

Claim 9 (original) The medical apparatus of claim 6, wherein:

said suction pump and said ventable source of pressurized gas comprise a single integrated compressor and vacuum pump unit; and

said control system controls said integrated compressor and vacuum pump unit responsive to both negative pressure supplied to said wound and positive force supplied to said foot wrap.

Claim 10 (currently amended) An apparatus for treatment of ulcers located on the heel or metatarsal head regions of a foot, comprising:

a dressing for applying a negative pressure to the heel or metatarsal head regions of a foot; and

a compressive element for applying a positive compressive force to a compressible regions of the foot including the plantar arch region; wherein said compressive element is comprised of a compressor for filling a reservoir to a target pressure, a control circuit for shutting off said compressor when said target pressure is reached and releasing said air into said compressible regions until an equilibrium pressure is reached between said reservoir and said compressible region.

Claim 11 (previously presented) The medical apparatus of claim 1, wherein at least some portion of said foot wrap is operable to overlap at least some part of said wound dressing wherein at least a portion of said second region overlaps said first region.

Claim 12 (previously presented) The medical apparatus of claim 1, wherein at least some part of said foot wrap is operable to overlap at least some part of said wound dressing wherein at least a portion of said second region overlaps said wound.

Claim 13 (previously presented) The medical apparatus of claim 1, wherein:

at least a portion of said wound dressing comprises elastically compressible foam overlapping said wound; and

at least some part of said foot wrap is operable to overlap at least some part of said wound dressing such that said second region overlaps said foam.

Claim 14 (previously presented) The medical apparatus of claim 1, wherein the positive pressure source is operable to supply said compressive force intermittently.

Claim 15 (previously presented) The medical apparatus of claim 1, wherein the positive pressure source comprises an oscillating air compressor.

Claim 16 (previously presented) The medical apparatus of claim 1, wherein the negative pressure source is operable to supply said negative pressure intermittently.

Claim 17 (currently amended) A medical apparatus for therapeutic treatment of foot ulcers, comprising:

a wound dressing for introduction of a negative pressure over a first region of a patient's foot including a wound, wherein said wound dressing is comprised of a porous foam positioned within said foot ulcer, a drape for covering and sealing said foam within said foot ulcer, and a fluid communication means in fluid communication with said foam;

a foot wrap having an inflatable bladder for applying a compressive force over a second region of the patient's foot, the second region at least partially overlapping the first region;

a negative pressure source that supplies negative pressure to the wound dressing through said fluid communication means; and

a positive pressure source that supplies compressive force to the foot wrap; wherein said positive pressure source is comprised of a compressor for filling a reservoir to a target pressure, a control circuit for shutting off said compressor when said target pressure is reached and releasing said air into said inflatable bladder until an equilibrium pressure is reached between said reservoir and said inflatable bladder.